Woo 71 BW 1029 (3)
Russula Woo71 Mary BC SIL
Woo 72 2/0 BW 639
iNat17704233 Russula Woo 72 turci 1/0 (photo odd) WA (+short WA iNat17704217)
Woo 72 turci (36)
Russula Woo 72 turci Marty F31213 Sooke SBC
Woo 72 3/0 BW 489
R. turci UNITE EU 4 KY582703 (1/1+3/3 Woo 72)
KF007951 R. avellaneiceps (Anna says TYPE match why)
AY061720 Russula turci EU Anna/Bart
R. turci UNITE EU 1 UDB037377 (1/1+5/1 Woo 72)
MZ017125.1 Fungal sp. isolate B24C1 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
JQ975978.1 Uncultured fungus clone R181 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
MZ018008.1 Fungal sp. isolate P21C1 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
Woo 70 grp (BW 172) (0/0 Buck16859)
R. murrillii Buck 16859 (alleles)
BTSP 03883 Russula murrillii alleles
HQ604850.1 Russula murrillii isolate 041114-01 voucher UBC:F19994 collector number 041114-01 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Russula murrillii Marty F31220 Sooke SBC
EF530935.1 Russula turci voucher UBC:F16268 collector number KS1 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Woo 70 murrillii (9) (caps UV+)
R. murrillii Buck 16861 (alleles)
R. amethystina UNITE EU 1 UDB063602
R. turci UNITE Asia+EU 2 UDB018793
R. turci UNITE EU 3 HM146851
R. amethystina UNITE EU 2 UDB000303
R. amethystina UNITE EU 3 KM517237
Russula (Macowanites) Vancouver BC KX812840
Russula chlorineolens WA iNat128647681 (type OR)
MT955146.1 Russula chlorineolens AK SAT-11-244-12
Woo 69 postiana WA BW 253 (2)
Russula aff postiana Woo 69 WA iNat 43028874
OQ322419.1 Russula Woo 69 PQx2
DQ422022.1 Russula risigallina voucher UE03.07.2003-08 UPS 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
FJ196955.1 Uncultured ectomycorrhiza (Russula) clone M66A7 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
R. risigallina (=lutea) UNITE EU 1 UDB015998
AY061713 Russula risigallina Bart
HQ604848.1 Russula lutea isolate 040528-01OC voucher UBC:F19981 collector number 040528-01OC 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
HQ604848 R. postiana JLF (3-4 ITS1 1-3 ITS2)
R. postiana UNITE EU overwhelming+Bart UDB000897
R. risigallina UNITE EU 2 (2/1 postiana) UDB000912
Russula 32 SAT 11-236-13 (AK R. postiana)
AB629056.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan i3
AB629032.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan42
AB628995.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07Jan51
AB629033.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan52
AB629027.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07Nov12
AB629039.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan a4
LC096811.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M4-1-35
AB628999.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07Mar22
AB629045.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan d1
LC096810.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M4-1-3
LC096812.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M4-1-38
LC096813.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M4-1-53
AB628996.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07Mar11
LC096479.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: K1-3-49
AB629010.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07May42
AB628998.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07Mar21
AB629009.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07May41
AB629059.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan m1
AB629055.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan i2
LC096474.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: K1-3-1
LC096475.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: K1-3-16
LC096809.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M4-1-2
AB629043.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan c1
LC096807.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M4-1-14
AB629035.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan63
LC096816.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M4-1-7
AB629008.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 07May31
AB629042.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan b1
AB629049.1 Uncultured Russula DNA internal transcribed spacer 1 5.8S ribosomal RNA and internal transcribed spacer 2 partial sequence isolate: 08Jan f1
LC096797.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M3-7-20
LC096799.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M3-7-50
LC096802.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M3-7-64
LC096798.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M3-7-34
LC096796.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M3-7-2
LC096800.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M3-7-54
LC096795.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: M3-7-18
EU598156.1 Russula cf. flavisiccans BB2004-219 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
OL739383.1 Russula emetica strain Prilba small subunit ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
UDB031751 R. paludosa EU (alleles)
UDB031535 R. paludosa UNITE EU unanimous + NBC F32603
Russula 13 FTNF 10-251-15 (AK R. paludosa)
HM044603.1 Uncultured Russula clone 145 18S ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and 28S ribosomal RNA gene region
KP889681.1 Uncultured fungus clone SG025 A02 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Russula benwooi WA iNat101581464
OL602014.1 Russula benwooii voucher iNAT:17704166 small subunit ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
FJ152488.1 Uncultured ectomycorrhiza (Russula) clone SLUBC28 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Russula 18 SAT 05-265-08 (WA R. benwooii but looks like R. murrillii)
Russula benwooii (slightly acrid) WA iNat34666625
R. benwooii 20171014DJM01 14985
Russula 14 FTNF 10-251-18 (AK R. benwooii 0/0 some WA stem very flushed)
Russula benwooii BC Campbell River JMK2022174R
Russula benwooii (iNat 17704166)
R. benwooii 0/0/3 WA iNat34944705
Woo 43 BW 644 R. sapinea 1/0 (5)
Russula cf idahoensis OR iNat19018063 (short 2/1/100)
KT968586.1 R. idahoensis OR Trappe 1600 (sister to entire garbage clade)
Russula cf idahoensis OR iNat63450939
KX812832 R. viridofusca 1979 TYPE WA ITS1 (short)
Woo 69a postiana AK 2/0 BW 253 1/0 postiana BW 955
Woo 59 viridofusca (31)
Woo 59 grp BW 605
Russula AK emetica iNat67650541
Woo 41 Arcata CALIFORNIA redwood oak madrone (1)
KX812833 Russula zelleri TYPE OR ITS1 (short)
KX812820 Russula bicolor TYPE VT (short ITS1)
Woo 68 benwooii 3/0+5/0 ITS2 (but dirty elsewhere) BW 066
Woo 67 BenWooii (61)
Woo 67 3/0 BW 409
KX812830 Russula sierrensis ITS1 TYPE CA (short)
Woo 67 3/0/14 BW 480
Woo 57 BW 198 aff vinososordida (4 UNITE 1 1 TYPE) (10)
R aff vinososordida BW 586
R. aff vinososordida BW 319
R. aff vinososordida BW 315
R. aff vinososordida BW 87
R. aff vinososordida BW 36
R. aff vinososordida BW 1083
R. aff vinososordida BW 34
R. aff vinososordida BW 396
R. aff vinososordida BW 911
KF617288.1 Uncultured fungus clone 3249F15 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
KC965992.1 Uncultured fungus clone 106 NA12 P32 O8 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Russula mendocinensis CA cf decolorans (1/0 ITS1 type match) DQ367913
KX812826 R. mendocinensis TYPE CA ITS1 (short) purple hot
R. aff vinososordida UNITE EU UDB011362
R. vinososordida TYPE Fin UDB011115
Woo 56 aff californiensis 6/2 (1)
Russula grundii TYPE CA (as basifurcata)
Russula californiensis CA (2/0 KX812821 TYPE ITS1) AY245542
Russula olivacea Woo58 OR iNat58924670 OQ453810
Russula JLF2245 iNat36563061 Woo 58 cf olivacea (0/0 little overlap)
Woo 58 cf olivacea Marty F31199 Victoria
Woo 58 cf olivacea
Russula olivacea Woo58 OR iNat34192596
R. Woo 58 cf olivacea FeSO4+ WA iNat34666166
KY582715 Russula olivacea UNITE EU 4
R. alutacea (only UNITE EU) UDB031172
R. olivacea UNITE EU 1 UDB011195
R. olivacea UNITE EU 3 UDB000323
R. caerulea UNITE EU consensus UDB000353
GU328598.1 Uncultured Basidiomycota clone man58B soil C01 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
EU598157.1 Russula compacta voucher PC BB2004-246 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
MZ017863.1 Fungal sp. isolate M13C3 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
Russula intermedia UNITE unanimous EU (red cap)
Russula intermedia PNW02 WA iNat 34667460 8/1 (pale yellow cap)
KC965868.1 Uncultured fungus clone 103 NA10 P31 A7 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Woo 64 aff velenovskyi 5/0 (1) Seattle birch
EF218811.1 Russula Woo64 aff velenovskyi Interior BC
R. velenovskyi UNITE EU overwhelming+Bart AY061721
KC424568.1 Uncultured ectomycorrhizal fungus clone SBG9 28S ribosomal RNA gene partial sequence
Woo 63 vinosa (occidentalis) (9)
Woo 63 vinosa BW 894
Russula vinosa WA (iNat 17704352 17704282)
OL602016.1 Russula vinosa voucher iNAT:17704282 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
EU057103.2 Uncultured ectomycorrhiza (Russula) clone ECUBC39 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Russula vinosa CA iNat182688435
AY228349.1 Russula vinosa voucher UBC:F14299 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
MT548390.1 Fungal sp. voucher ARIZ:NF13B1 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
MT548389.1 Fungal sp. voucher ARIZ:NF13A2 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
MT548388.1 Fungal sp. voucher ARIZ:NF13A1 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
AY061724 Russula vinosa UNITE EU overwhelming + Bart (2/0 WNA)
KP889935.1 Uncultured fungus clone SG026 A02 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
OL602007.1 Russula vinosa voucher iNAT:17704352 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
FJ152486.1 Uncultured ectomycorrhiza (Russula) clone SLUBC30 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
AY061665 R. claroflava (=flava but var pacifica type PNW) UNITE EU overwh+Bart
Russula pubescens UNITE Finx4 (type Fin) UDB036974
Russula pubescens AK iNat6750498
MT583289.1 Russula pubescens UNITE Finx4 (+circumboreal)
Russula pubescens Fin 2 (type Fin) UDB011111
Woo 55 aff firmula 98 (but 1 diff in longish strings only) (7)
Woo55 aff firmula ID iNat195590826
R. firmula UNITE EU consensus UDB016073
AF418630 Russula veternosa UNITE EU unanimous
JF834349.1 Russula basifurcata PNW01 CA
Russula basifurcata PNW01 WA iNat128709146 Beug oak
Woo 62 mordax (BW 458)
Russula mordax WA (iNat 17704170)
Woo 62 mordax grp (BW 672)
Woo 62 mordax = tenuiceps (68)
Woo 62 mordax grp (BW 718)
iNat 34346623 Russula mordax BTSP
AF335442 Russula mordax Seattle (TYPE WA match)
iNat 34329315 Russula mordax BTSP
Russula mordax (greying as vinososordida) OR (MP 6598893)
Russula mordax WA (iNat 17704208)
KX812828 R. mordax TYPE WA ITS1 (short)
Russula 3 SAT 97-263-07 (WA R. mordax chunk of 3 indel from ITS1 TYPE)
JQ975977.1 Uncultured fungus clone R42 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
MG715412.1 Uncultured Russulales clone KT37A small subunit ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
R. integra UNITE EU overwhelming+Bart AY061683
394B
Woo 65 (2 100)
393F
JF834336.1 Russula sierrensis CA match to ITS1 type + ITS2 Woo 66
Russula sierrensis OR iNat35169996
Russula sierrensis WA iNat 18217120
MZ017365.1 Fungal sp. isolate A15C1 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
MZ017217.1 Fungal sp. isolate C22B2 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
MZ018009.1 Fungal sp. isolate P13C6 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
MZ017366.1 Fungal sp. isolate A25C4 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
MT371760.1 Russula cf. integriformis voucher Mushroom Observer 327182 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
R. integriformis UNITE EU consensus+Bart AY061684
Woo 66 sierrensis (12)
FR852098.1 Uncultured Russula genomic DNA containing ITS1 5.8S rRNA gene ITS2 clone Ir5
JF834368 Russula ocher oaks 1/2 PNW03 CA
Russula ocher oaks 1/2 PNW03 OR iNat128393456
KF617972.1 Uncultured fungus clone 3197H19 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
GU998665 Russula sphagnophila NA+EU (type MI) UNITE 1
R. nitida UNITE unanimous KU205349
Russula 38 SAT 13-286-04 (WA birch R. nitida atypical)
Russula subrubens UNITE EUx40 (= newer chamiteae) GU234054
Russula subrubens WA iNat152769204
Russula subrubens UNITE EUx50 UDb002453
KU205348.1 Russula chamiteae TYPE Fr (= older subrubens)
R. pseudo-olivascens 2002 TYPE (=clavipes Adamcik =elaeodes) KU205304
Russula clavipes 1920 official Adamcik UDB011174 (=R. pascua DNA)
KU205345 Russula nuoljae official Adamcik
Russula 34 SAT 12-248-01 AK (R. nuoljae)
Russula viridofusca 1979 BC (TYPE WA match)
Russula cf favrei 1979 UNITE NA (type EU) KJ146730
Russula viridofusca Mary BC KLB
R. viridofusca WA iNat34943706 olive-tan
Woo 59 grp 2/0 BW 1018
Woo 60 favrei elaeodes (8)
Woo 60 favrei grp BW 1077
Russula favrei 1979 UNITE EU NA JF908683
AY228344 Russula favrei Woo 60 Mary UBC
HM240542 Russula favrei Mary UBC
Russula xerampelina (UNITE overwhelming EU consensus) AY641462
Russula aff xerampelina (UNITE NA consensus) KJ748429
Russula aff xerampelina (3/0 ITS + 4/1 other) WA (iNat 17704264) Woo 2018
Russula 21 SAT 08-231-10 (NM Copper xerampelina PNW)
Russula Woo 61 aff xerampelina S. Sound (iNat 14391113) looks like occidentalis DNA (error)
Russula 17 SAT 05-259-04 (R. xerampelina PNW)
Woo 61 aff xerampelina (13)
Russula Woo 61 aff xerampelina WA (iNat 17704364)
Woo 54 punicea nom ill (2)
Russula Woo54 punicea nom ill OR iNat99432404
JF834344 Russula Woo54 punicea nom ill CA
R. olivacea UNITE EU 2 UDB000322
FJ152484.1 Uncultured ectomycorrhiza (Russula) clone SLUBC31 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Russula decolorans UNITE EU overwhelming AY194601
Russula decolorans Campbell River Vanc Isl Marty
Russula decolorans Mary UBC Yun Ting Pang (dirty)
Russula 29 SAT 10-207-07 AK R. decolorans
R. decolorans NBC Marty JMK2016030
FJ152485.1 Uncultured ectomycorrhiza (Russula) clone SLUBC32 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
R. decolorans NBC Marty UDB024044
Woo 48 (1) Shelton WA (brown w/ dk purple disc)
Russula pelargonia UNITE EU 2 (single record) UDB025080
Russula pelargonia UNITE EU overwhelming UDB0352249
FN669244.1 Russula sp. B181 partial 18S rRNA gene ITS1 5.8S rRNA gene and ITS2 specimen voucher B181
AY061725 Russula violacea EU Bart
AF506465 Russula cf violacea EU genbank
HQ604851.1 Russula sp. isolate 040918-02 voucher UBC:F18879 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
R. olivina UNITE EU 1 +Bart UDB016260 (4/1 ITS1+3/1 ITS2 olivobrunnea)
R. olivobrunnea UNITE EU 1+Bart UDB011113 (2 locked 1)
Woo 46 aff olivobrunnea (3 100) (2/0 olivobrunnea ITS2)
MZ018025.1 Fungal sp. isolate P12C2 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
MZ017275.1 Fungal sp. isolate C31B3 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
Woo 46 (longer) WA iNat49152192 (6/0 olivobrunnea) (Doug fir+alder)
Russula Woo 46 WA iNat124747995
Woo 53 zelleri (16) (all =2/0 type)
SVMFA074 Russula zelleri AB
Woo 51 (2)
Russula 12 FTNF 10-249-32 (AK R. zelleri 100 ITS1 TYPE)
JF834326 Russula zelleri longer CA (1/0 ITS1 type match)
Russula cessans Anna EU TU101805 UDB015971
Russula nauseosa UNITE EU 2 UDB011164
KT933985 Russula nauseosa UNITE EU 1
Woo 52 pseudotsugarum (25)
BW 953 Russula pseudotsugarum TYPE WA KX813578 Woo 52
Russula pseudotsugarum OR NAMA 2018 (iNat 17471976 greenish tones WA 17704180)
R. pseudotsugarum JMK2016040 Vanc Isl
Russula subloculata ID (same ITS as R. zelleri)
Russula Woo 51a Marty 384F Victoria
Russula Woo 51a (cf cessans) Victoria BC KX812850 F30306 (unsp. trees)
JF834352 Russula Woo 51a CA (as cf murrillii)
Russula 16 SAT 04-274-01 (WA Arb R. obscurozelleri)
Russula obscurozelleri OR iNat17471827
Russula obscurozelleri HOT WA iNat34942612
MP 6598753 - Russula obscurozelleri NAMA2018
Woo 50 obscurozelleri (40)
Russula obscurozelleri Vashon WA (MO 342154)
Russula 33 SAT 12-247-02 (AK R. graminea)
Russula 46 SAT 16-244-09 (AK R. graminea dk purple green center)
Woo 47 graminea 0/1 (14)
Russula graminea Buck 122 1 WA (0/0 Woo 47)
R. graminea iNat36563847 JLF3428 Crater Lk OR (yellow spicy)
Russula 36 SAT 13-274-05 (AK R. graminea much purple)
Russula graminea NAMA2018 OR (iNat 17477866)
Russula graminea UNITE EU unanimous KC164353
R. graminea JLF3426 Crater Lk OR (yellow spicy)
Russula graminea ID iNat178208670
KJ146728.1 Russula graminea voucher UBC:F23912 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
Russula 30 SAT 11-217-02 (Russula AK01)
Russula AK01 N BC Marty UDB024046
Russula AK01 CO iNat129477291
KF617367.1 Uncultured fungus clone 3267N15 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
AB973738.1 Russula sp. 1E4 genes for 18S rRNA ITS1 5.8S rRNA ITS2 28S rRNA partial and complete sequence
NR 137756 Russula jilinensis TYPE China 2012 (0/0-1 aurantioflammans)
Woo 49 (1) Satus Pass WA (cream cap)
UDB015060 R. aurantioflammans UNITE EU unanimous 1998
Russula aurantioflammans AZ iNat44321947
Russula aurantioflammans 31 SAT 11-217-03 Fairbanks AK acrid birch-aspen
Russula aurantioflammans AZ iNat44322692
Russula aurantioflammans AZ iNat44318785
Russula aurantioflammans Williams Lk BC Marty envir pure Doug fir
KT933983 Russula cremeirosea UNITE NA 1 (type FL)
EU819514 Russula cremeirosea UNITE NA 3
KT697970 Russula cremeirosea UNITE 2 MX
Russula Woo 42 OR spring SAT-15-150-1 (dried stem somewhat yellow-tan)
Woo 42 cf puellaris (1) KX812946 Fall
Russula Woo 42 iNat35711270 OR fall
HQ703024 Russula puellaris UNITE EU overwhelming
R. olivina UNITE EU 2 UDB002598 (wrong yellowing clade)
KR019818 Russula sapinea UNITE EU unanimous overwhelming
EF433973.1 Uncultured fungus clone C17 OTU29 small subunit ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
R. sapinea Woo 43 (as sphagnophila UNITE NA 2) 4/0 ITS+3/0 JMK2016036 Vanc. Isl
HQ604852.1 Russula puellaris voucher UBC:F19703 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
FJ152487.1 Uncultured ectomycorrhiza (Russula) clone SLUBC29 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
R. sapinea Woo 43 2/1 ITS+2/0 Buck16856
BW 861 R. sapinea 3/0
MZ017895.1 Fungal sp. isolate M14C5 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
MZ017265.1 Fungal sp. isolate C25A2 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
MG761509.1 Fungal sp. voucher ARIZ:PM423A internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
MZ017894.1 Fungal sp. isolate M14C2 small subunit ribosomal RNA gene internal transcribed spacer 1 5.8S ribosomal RNA gene internal transcribed spacer 2 and large subunit ribosomal RNA gene region
EU598179 Russula cf abietina TN (type NY) (2/0 Woo) Bart
KF359677 Russula cf abietina TN (1/0 TN)
Woo 45 BW 508 aff cf abietina (4)
BW 1063 R. aff cf abietina (2/0 BW 508 etc)
KY582706 Russula odorata UNITE EU
Russula cessans (only UNITE EU) JN944011
MT548438.1 Fungal sp. voucher ARIZ:NF17B3 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
iNat31303571 Russula versicolor 1/0 WA birch
MT548247.1 Fungal sp. voucher ARIZ:F19B1 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
MT548213.1 Fungal sp. voucher ARIZ:F16B2 internal transcribed spacer 1 partial sequence 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and large subunit ribosomal RNA gene partial sequence
Russula Woo 44 aff versicolor AK iNat100100884
UDB031648 R. versicolor UNITE EU 2 (aff versicolor WA)
FJ845431 Russula aff versicolor Woo44 (6/0-1) (as gracilis) NBC conifers
Woo 44 aff versicolor yet birch (2/1 ITS2 +4 ITS1) (1)
Russula Woo 44 SAT 15-314-03 (R. aff versicolor Seattle cottonwoods)
Russula Woo44 aff versicolor Populus WA iNat34749707 (=genbank odorata 2 = UNITE)
UDB011096 R. versicolor UNITE EU 3 (1/300) (0/0-4 ITS1)
AY061722 Russula versicolor Bart
HQ445521 Russula versicolor UNITE EU 1
AY656976 R. bicolor 1/0 TYPE match
KC424532.1 Uncultured ectomycorrhizal fungus clone c73 18S ribosomal RNA gene partial sequence internal transcribed spacer 1 5.8S ribosomal RNA gene and internal transcribed spacer 2 complete sequence and 28S ribosomal RNA gene partial sequence
LC096285.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: A2-2-1
LC096287.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: A2-2-2
LC096289.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: A2-2-22
LC096298.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: A2-2-72
LC096292.1 Uncultured fungus genes for ITS1 5.8S rRNA ITS2 partial and complete sequence clone: A2-2-36
Russula brunneoviolacea UNITE EU unanimous (type China) UDB015985
RUSSULA DENSIFOLIA (OUTGROUP)
0.050